Title (en)

METHOD AND DEVICE FOR THE MEASUREMENT OF THE WAVE SURFACE DEFORMATIONS INTRODUCED BY AN OPTICAL SYSTEM

Publication

EP 0079276 B1 19870128 (FR)

Application

EP 82402008 A 19821029

Priority

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- FR 8207499 A 19820430
- FR 8207645 A 19820503

Abstract (en)

[origin: US4558948A] The invention relates to an apparatus for measuring the wave surface distortions introduced by a lens, comprising a source which emits coherent light of frequency nu o; means for creating a reference beam and a measuring beam; a Bragg cell receiving and transmitting said beams, excited by a radio-frequency wave of frequency f emitted by a generator, the reference beam transmitted having the frequency nu o and the measuring beam diffracted by the cell having a frequency nu o+f; means for transmitting the beams from the cell to the lens to be tested; detection means transforming the light signal from the lens into an electrical signal of frequency f and whereof the phase is characteristic of the wave surface distortions introduced by the lens; and means for measuring the phase displacement between the phase of the electrical signal from the detection means and the phase of an electrical signal corresponding to the radio-frequency waves.

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IPC 8 full level

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CPC (source: EP US)

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Citation (examination)

"Photoeleastic and Electro-Optic Properties of Crystals", T.S. Narasimhamurty, Plenum Press, New-York and London, 1981, pages 289, 294

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EP0167410A3; EP0631660A4; CN109029925A

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